LG RMU I

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ISO14001 ISO9001

TRIMEC RMU

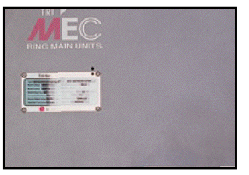
RING MAIN UNIT

TYPE : RPF (1T)
TYPE : RPL (1L)
TYPE : RPS (2L-1T)

LG Industrial Systems

LGIS's SF_6 Ring Main Unit

for system voltage up to 24kV,
are non-extensible and extensible
for cubicle systems



RMU

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1. GENERAL DESCRIPTION

LGIS's SF_6 ring main unit for system voltage up to 24kV, are non-extensible and extensible for cubicle systems.

- **RPS (2L+1T)**

  This type consists of a single, sealed tank containing two load break switches and one switch fuse combination with strike fuses mechanism (a blown fuse causes the switch open)

  It can be used for transformer protection, cable protection etc.

- **RPL (1L)**

  Cubicle load break switch with earthing switch. It is doing 3-Position (Close-Open-Earth) operating duty

- **RPF (1T)**

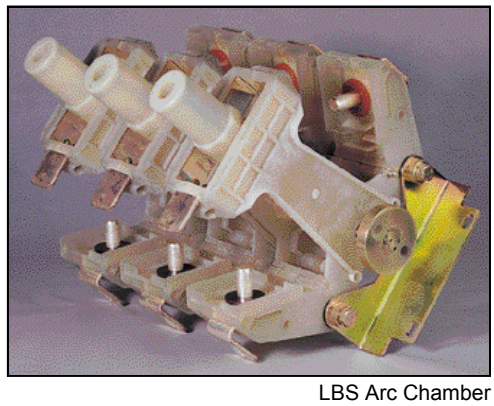
  Switch fuse combination with striker fuses mechanism (a blown fuse causes the switch open)

2. RATINGS

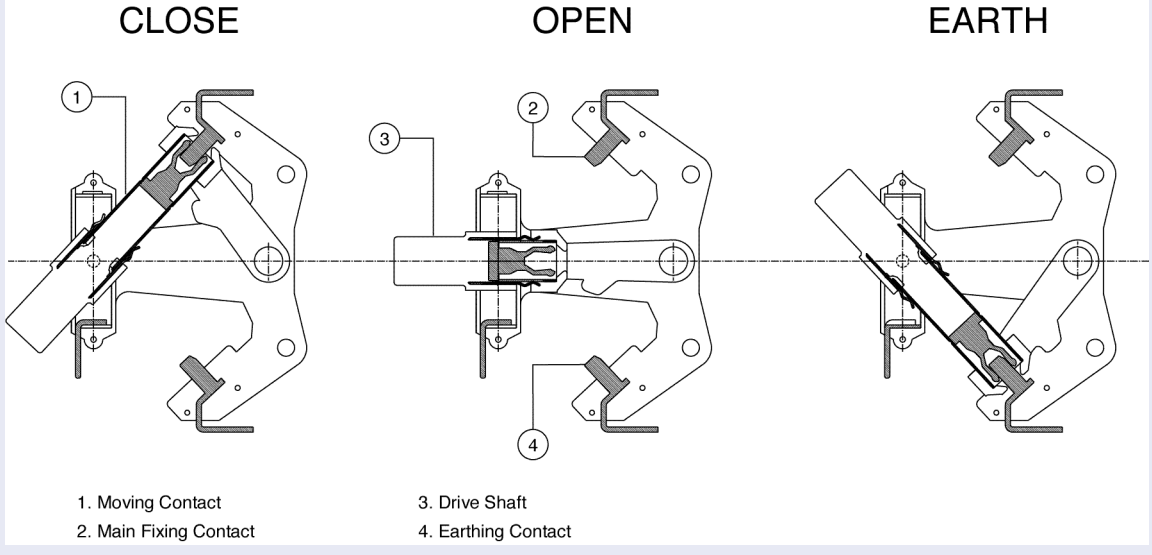
Rated voltage up to	24kV
Rated current	630/400/200A *
Rated short-time withstand current (1s)	16kA
Rated making current	40kA
Rated mainly active load breaking current	630/400A
Rated closed loop breaking current	630/400A
Rated cable charging current	25A
Rated impulse withstand voltage	125kV
Rated power frequency withstand voltage	50kV
Rated power frequency	50/60Hz
Rated motor operating voltage	24VDC

* Rated current 200A at fuse section.

3. ARC QUENCHING CHAMBER



LBS Arc Chamber



1. Moving Contact
2. Main Fixing Contact
3. Drive Shaft
4. Earthing Contact

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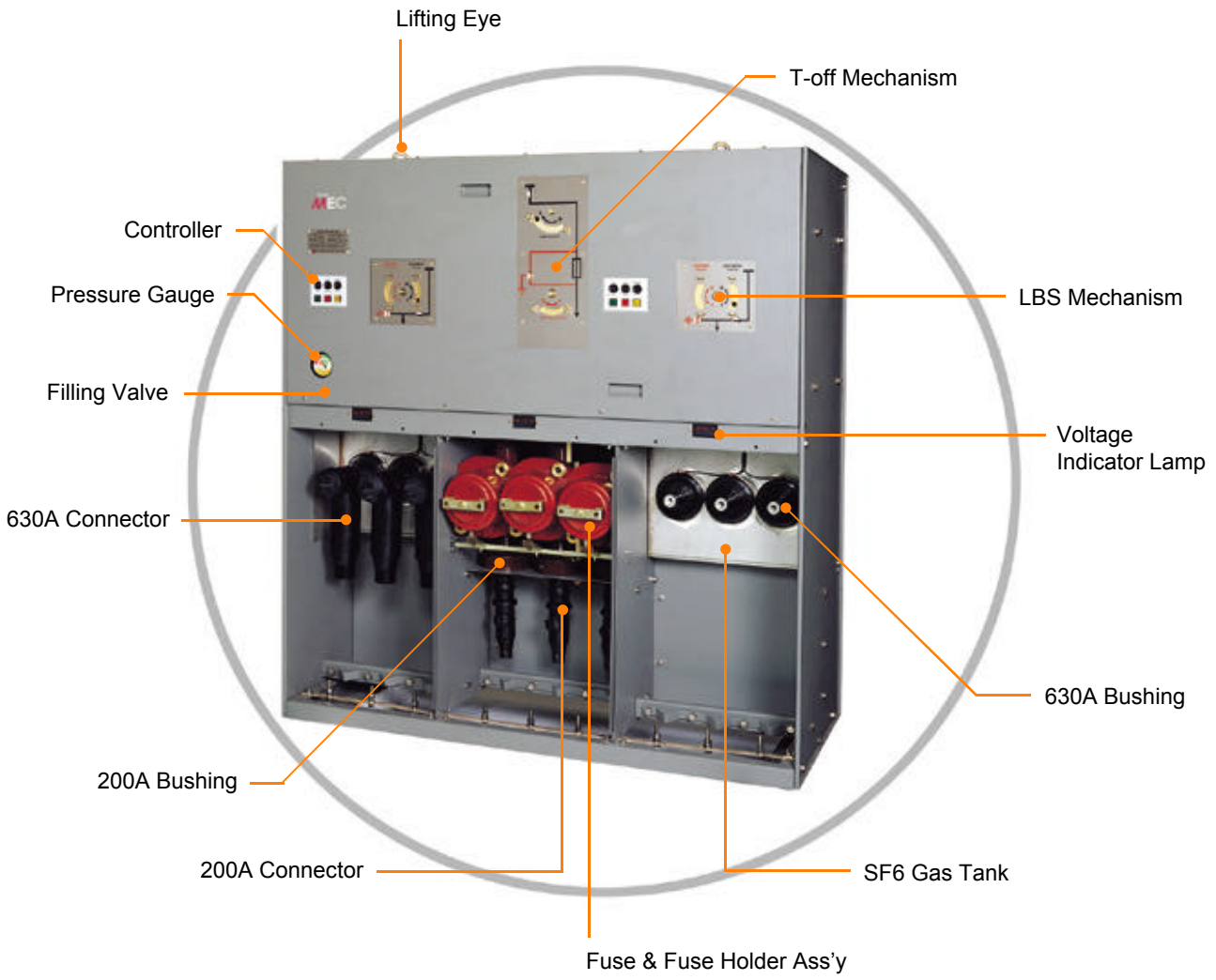
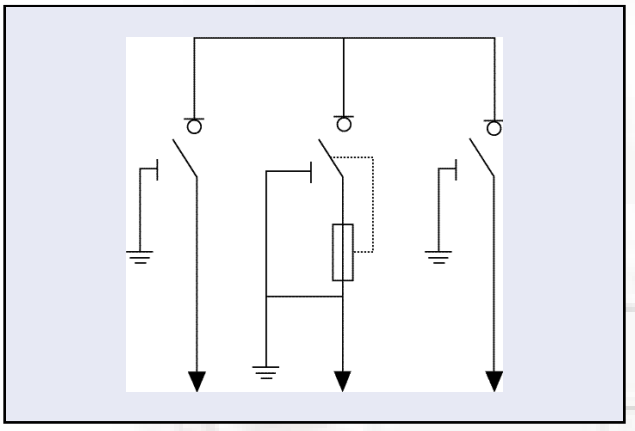
4. CONSTRUCTION FEATURES (NON - EXTENSIBLE)

■ **RPS (2L+1T) External view**

- Dimension(mm) W:1400 H:1530 D:700



■ **RPS (2L+1T) Single line diagram**



Single line diagram (2L+1T)

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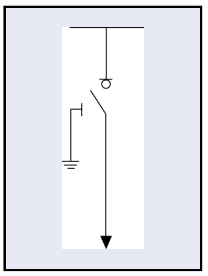
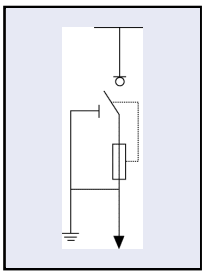
4. CONSTRUCTION FEATURES (EXTENSIBLE)



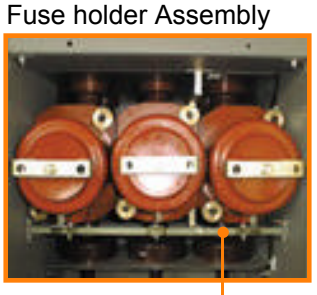
■ **RPL (1LBS)**
Single line diagram
- Dimension(mm)
W:450 H:1750 D:730

■ **RPF**
(1Switch Fuse Combination)
Single line diagram
-Dimension(mm)
W:510 H:1750 D:730



5. FUSE HOLDER & HRC POWER FUSE

Fuse holder Assembly



Fuse Strike Link

Power Fuse

HRC Power Fuse

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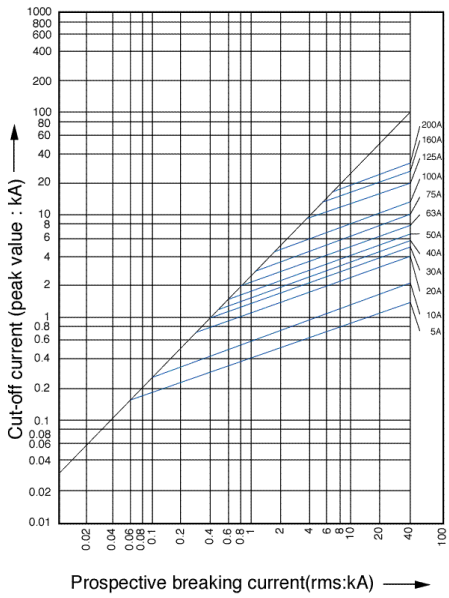
5-1. For Transformer Protection

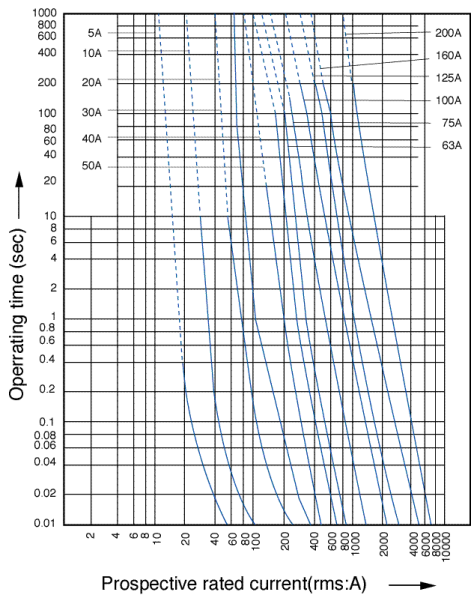
Circuit Voltage(kV)	Transformer Capacity (kVA)	Applied Fuses
24	36~75	LFL-20G-5B
	75~157	LFL-20G-10B
	172~358	LFL-20G-20B
	258~538	LFL-20G-30B
	464~965	LFL-20G-40B
	598~1246	LFL-20G-50B
	745~1554	LFL-20G-60B

5-2. Characteristics Curves

24kV Cut - off characteristics



24kV Pre-arcing time-current characteristics



6. ARRANGEMENT CONFIGURATION

1L+1T

3L+1T

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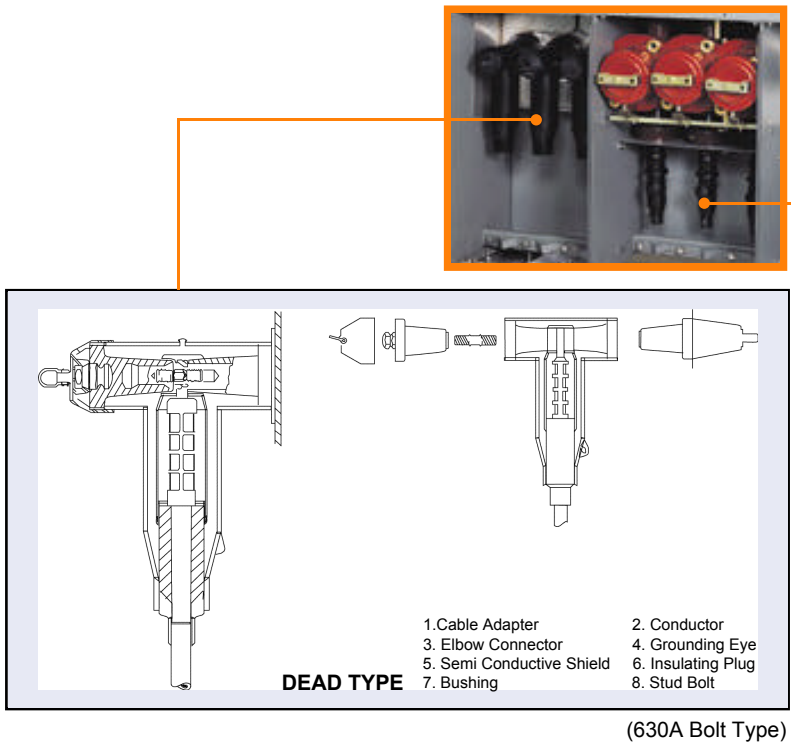
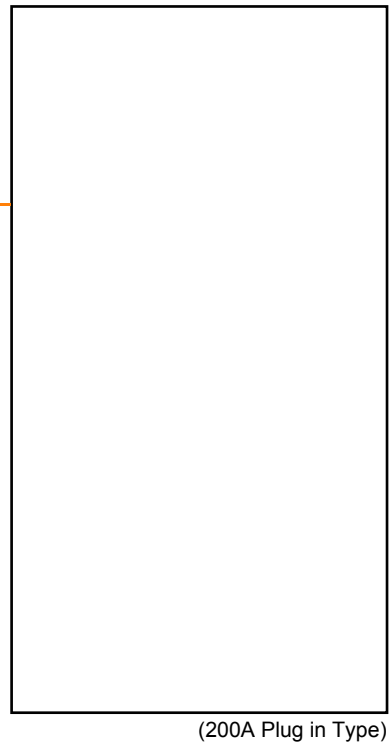
7. CONNECTION FOR 630A/200A BUSHING



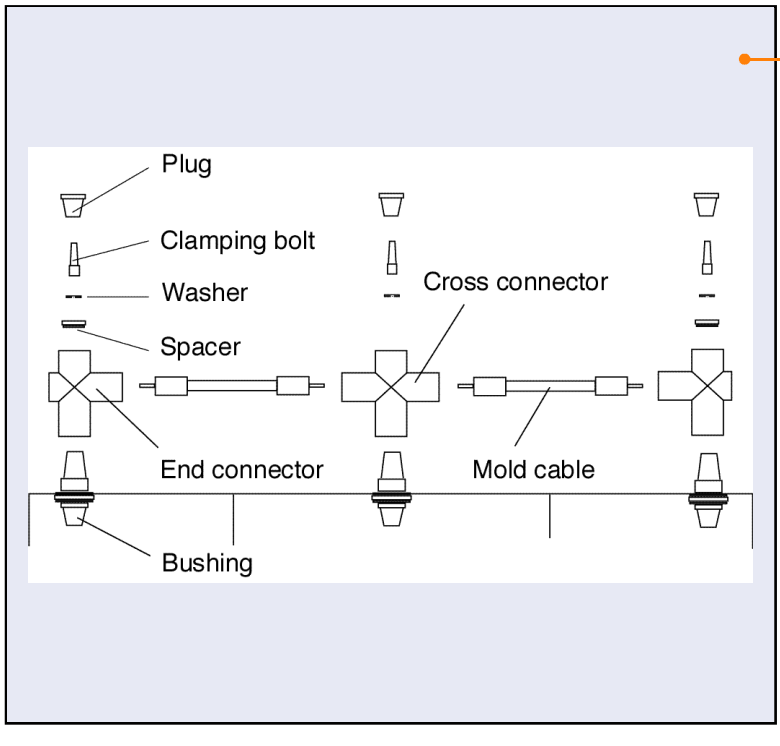
(630A Bolt Type)

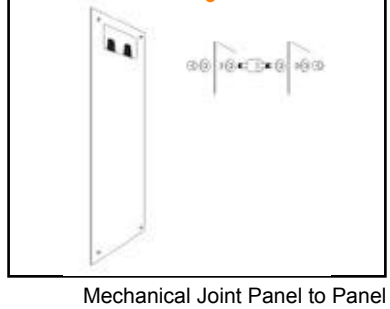


(200A Plug in Type)

8. CONNECTION FOR MAIN BUS

Electrical Connection with special connectors





Mechanical Joint Panel to Panel

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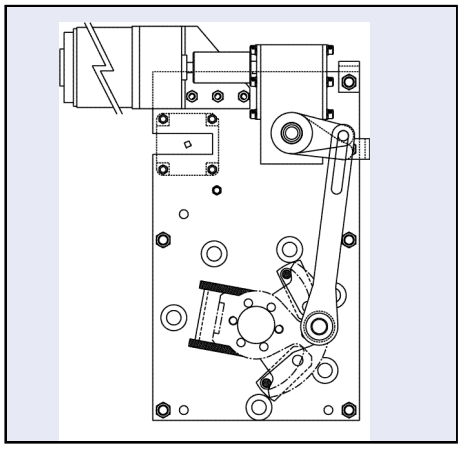
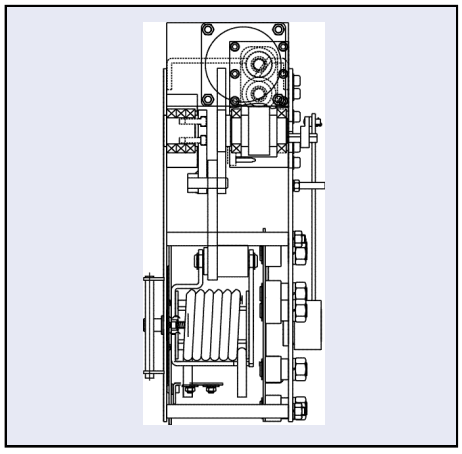
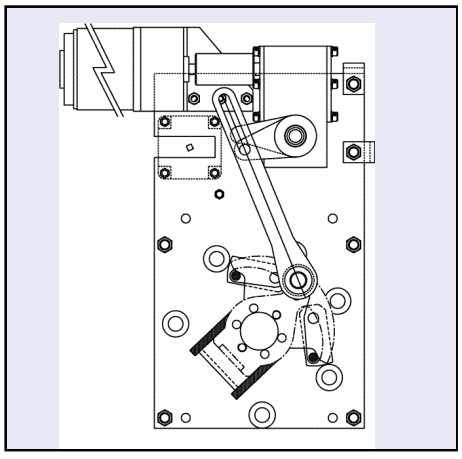
9. MOTOR MECHANISM

- Spring charging motor mechanism for remote
- Remote ON 阻 OFF control, EARTH is manual on site
- Control voltage DC 24V (External Supply Voltage AC220V)

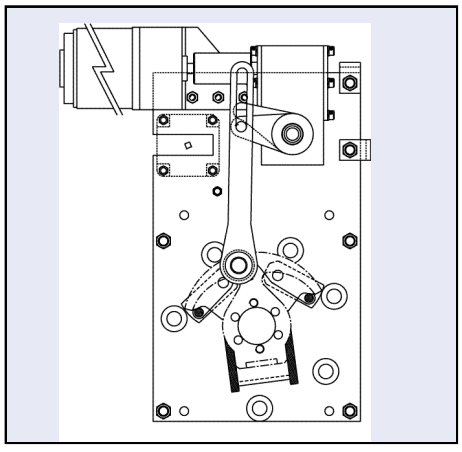


ON





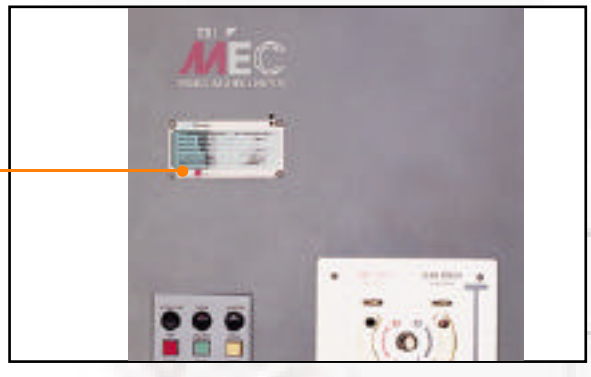
OFF



EARTH

10. ELECTRICAL(REMOTE/LOCAL) OPERATION

- Main power : AC220V
- Control power : DC24V
- Communication with FRU (Feeder Remote Unit)



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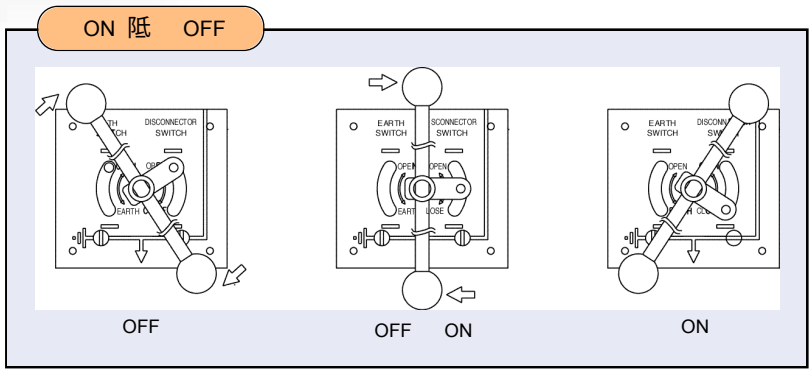
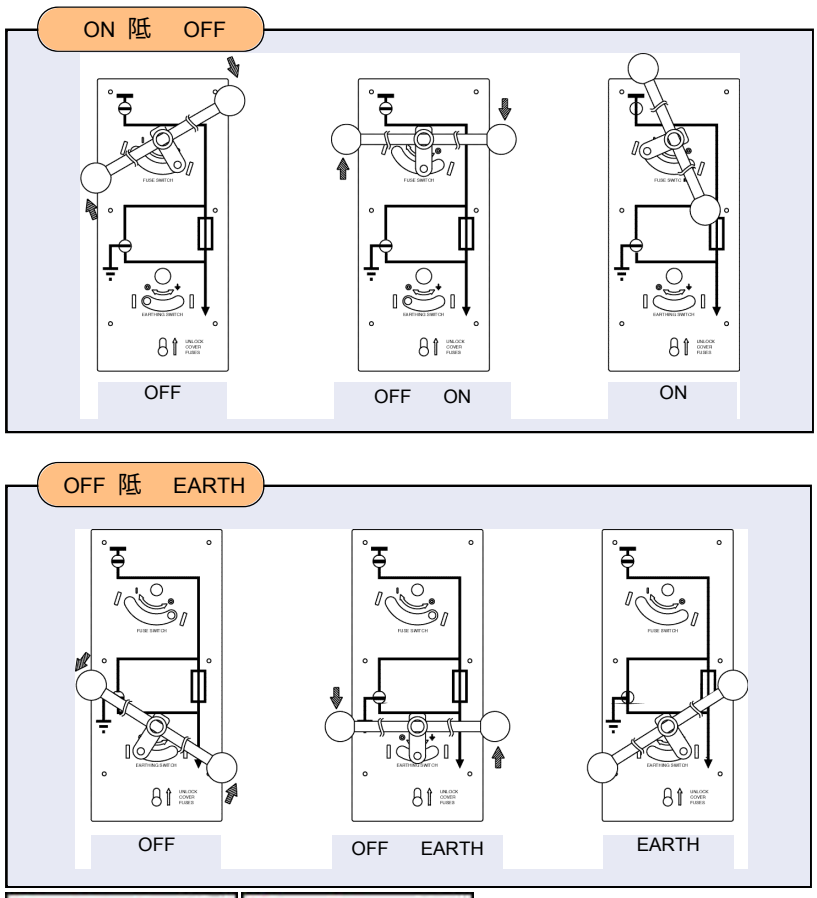
11. MANUAL OPERATING FOR LBS MECHANISM



12. MANUAL OPERATING FOR T-OFF MECHANISM



13. ACCESSORIES

Phase comparator

Voltage indicator

Earth fault and Short circuit indicator

Cable testing adapter

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KEMA

HIGH-POWER LABORATORY
Utrechtseweg 310 – 6812 AR Arnhem – The Netherlands

382-97

REPORT OF PERFORMANCE

CLIENT LG Industrial Systems Co., Ltd.,
Cheong Ju, Korea

MANUFACTURER LG Industrial Systems Co., Ltd.,
Cheong Ju, Korea

APPARATUS Three-phase load-break switch in a SF_6-insulated metal-clad ring main unit

DESIGNATION Ispack-1

SERIAL No. 970003

RATINGS ASSIGNED BY THE MANUFACTURER

Voltage	24	kV	Making current at	24 kV	40	kApeak
Normal current	630	A	Short-time current:			
Frequency	50	Hz	Peak value		40	kApeak
Number of poles	3		rms value	16 kA	during	1 s
Breaking current at 24 kV:			SF_6-pressure at	20° C	1.2	bar(abs)
Mainly active load	630	A				
Cable-charging	25	A				
Closed loop	630	A				
Power factor	0.7					
First-pole-to-clear factor	1.5					

The tests have been carried out in accordance with the client's instructions.

Date of tests: 13th May 1997

The performance of the apparatus tested and the observations made during the tests have been recorded in the tables with test results and the oscillograms.

THIS REPORT CONSISTS OF:

Sheets	4
Circuit diagrams	1
Oscillograms	1
Drawings	6
Photographs	2
Information sheet	EP36

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KEMA Nederland B.V.

H.W. Kemper

Arnhem, 16th June 1997

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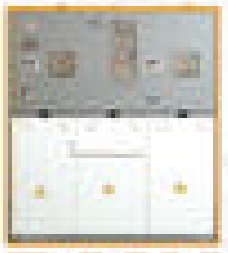

RMU

LG constantly endeavors to improve our products so that information in this catalog is subject to change without notice

LG Industrial Systems

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